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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 08/875,916 | 10/31/1997 | PETER VINZ | 006105.00001 | 4481 |
| 7590 | 07/05/2005 | | EXAMINER | |
| AJAY PATHAK ESQ BANNER & WITCOFF LTD 1001 G ST NW WASHINGTON, DC 20001 | | | KALAFUT, STEPHEN J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1745 | |

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|--------------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 08/875,916 | VINZ, PETER |
| | Examiner Stephen J. Kalafut | Art Unit 1745 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 September 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 30-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 30-56 is/are allowed.
- 6) Claim(s) 57-63 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 05 October 2000 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10/31/1997</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

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A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/17/2002 has been entered.

Claims 57-63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is not antecedent for "said EGDVGVM" in claim 57, section (e), or claim 59. Claim 57 also recites sufficient conduits to connect parts (a) through (e), but part (c) is an electrically connection, which would not be involved in fluid flow like the other parts. Claims 58-63 depend from claim 57, and would likewise be indefinite.

Claims 30-56 are allowed. The prior art cited either previously or herein does not disclose a method of operating a cell in which a gas/vapor mixture is reacted at one electrode, where the gas and vapor components are transferred into a liquid mixture at the other electrode, the gas/vapor/liquid mixture is then separated into gas and liquid phases, each containing some of the vapor species, and the vapor species is eventually recycled back to the gas/vapor mixture.

Claims 57-63 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. These claims, to the extent they are understood, also recite a cell in which a gas/vapor mixture is reacted at one electrode,

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where the gas and vapor components are transferred into a liquid mixture at the other electrode, the gas/vapor/liquid mixture is then separated into gas and liquid phases, each containing some of the vapor species, and the vapor species is eventually recycled back to the gas/vapor mixture.

The disclosure is objected to because of the following informalities: The drawings do not contain numerals 4.1 or 5.1, as stated on page 2/11, lines 1 and 6, or numerals 23.1 and 23.2, on page 2/15, last line and page 2/16, line 4. Drawing numeral 28.1, in figure 2, is not mentioned in the specification. Appropriate correction is required.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. DuBose (US 6,013,385) discloses a fuel cell with a device which transfers water vapor from the cathode exhaust to the cathode input. Surampudi *et al.* (US 6,248,460) disclose a cell in which oxygen and water vapor contact one electrode, while a liquid mixture of methanol and water contacts the other. Applicant's IDS of 31 October 1997 is noted. The references are the same as those cited in the IDS of paper no. 19, which was acknowledged in paper no. 20.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 571-272-1286. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sjk



STEPHEN KALAFUT
PRIMARY EXAMINER
GROUP 1700